

LEXSEE 147 F. APPX. 979

ENGINEERED PRODUCTS CO., Plaintiff-Cross Appellant, v. DONALDSON COMPANY, INC., Defendant-Appellant.

04-1596, 05-1002, 05-1037

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT*147 Fed. Appx. 979; 2005 U.S. App. LEXIS 18828***August 31, 2005, Decided**

NOTICE: [**1] THIS DECISION WAS ISSUED AS UNPUBLISHED OR NONPRECEDENTIAL AND MAY NOT BE CITED AS PRECEDENT. PLEASE REFER TO THE RULES OF THE FEDERAL CIRCUIT COURT OF APPEALS FOR RULES GOVERNING CITATIONS TO UNPUBLISHED OR NONPRECEDENTIAL OPINION ORDERS.

PRIOR HISTORY: *Engineered Prods. Co. v. Donaldson Co.*, 335 F. Supp. 2d 973, 2004 U.S. Dist. LEXIS 18850 (N.D. Iowa, 2004)

Engineered Prods. Co. v. Donaldson Co., Inc., 225 F. Supp. 2d 1069, 2002 U.S. Dist. LEXIS 18754 (N.D. Iowa, 2002)

Engineered Prods. Co. v. Donaldson Co., 330 F. Supp. 2d 1013, 2004 U.S. Dist. LEXIS 15837 (N.D. Iowa, 2004)

JUDGES: Before NEWMAN, Circuit Judge, ARCHER, Senior Circuit Judge, and SCHALL, Circuit Judge.

OPINION BY: SCHALL

OPINION: [*981] SCHALL, Circuit Judge.

DECISION

Donaldson Company, Inc. ("Donaldson") appeals from the judgment of the United States District Court for the Northern District of Iowa awarding Engineered Products Co. ("EPC") damages in the amount of \$ 15,839,004 for infringement of *U.S. Patent No. 4,445,456* ("the '456 patent") by two of Donaldson's products. *Engineered Prods. Co. v. Donaldson Co.*, 335 F. Supp. 2d 973, (N. D. Iowa 2004) ("Amended Judgment"). For its part, EPC conditionally cross-appeals the district court's decisions allowing Donaldson to assert the defense of obviousness-type double patenting, *Engineered Prods. Co. v. Donaldson Co.*, 225 F. Supp. 2d 1069, 1082-86 (N. D. Iowa 2002)

("Summary Judgment II"), and denying EPC's motion to reassert infringement of *U.S. Patent No. 4,369,728* ("the '728 patent"), [*2] *id. at 1131*. For the reasons stated herein, we affirm-in-part, reverse-in-part, vacate-in-part, and remand for further proceedings consistent with this opinion.

[*982] **DISCUSSION I.**

EPC owns the '456 and '728 patents. The patents, both titled "Air Filter Restriction Indicating Device," relate to devices that detect the level of contamination of an air filter of an internal combustion engine. The patents generally claim an indicator device that is comprised of a chamber that is divided by a diaphragm into a first chamber and a second chamber. The first chamber contains an indicating member and is connected to the air flow between an engine's air filter and air intake. The indicating member is in turn attached to the top of the diaphragm. The air pressure in the first chamber decreases as the contamination of the air filter increases, which in turn causes the diaphragm and, thus, the indicating member, to move upward in the chamber. A transparent wall of the chamber allows an individual to see the position of the indicating member within the chamber and thereby gauge the contamination level of the air filter in order to determine whether it is in need of replacement. [**3] See generally '456 patent, col. 3, l. 33 to col. 5, l. 2; *id.* claim 1, col. 6, l. 38 to col. 7, l. 55; '728 patent, claim 1, col. 5, l. 66 to col. 7, l. 33.

An important feature of the device is its "lock-up means," which is comprised in part of a "locking member." The lock-up means allows the locking member to only 1596, 05-1002, move in one direction within the chamber, i. e., the direction in which the diaphragm moves as the pressure in the first chamber decreases. This is important because, without the lock-up means, the indicating member would return to its original position at the bottom of the chamber when the engine was turned off. The lock-up means therefore allows an indi-

vidual to monitor the air filter's contamination when the engine is on or off. The lock-up means also makes the indicator a "progressive indicator" in that it provides information as to the degree of contamination of the air filter. See *'456 patent*, col. 5, ll. 3-31. Finally, the claimed device also has a "means for selectively disengaging" the lock-up means. This allows an operator to reset the indicator after, for example, a new air filter is installed. See *id.* col. 5, l. 36 to col. 6, [**4] l. 18.

EPC initially sued Donaldson for infringement of the *'456* and *'728 patents*. n1 EPC specifically accused two of Donaldson's products, the Air Alert and the NG Air Alert, of infringing one or more claims of the patents. However, EPC and Donaldson subsequently entered into a joint stipulation in which EPC agreed to dismiss its infringement claims under the *'728 patent*. EPC's stipulation was based at least in part on Donaldson's concession of infringement of the *'456 patent* by the Air Alert. Donaldson also agreed to drop its claim of invalidity of the *'728 patent*. The district court thereafter dismissed EPC's infringement claim under the *'728 patent* with prejudice, along with "any other claims or defenses of either party to the extent they rely upon the *'728 patent*." *Engineered Prods. Co. v. Donaldson Co.*, 165 F. Supp. 2d 836, 841 n. 1 (N. D. Iowa 2001) ("Summary Judgment I").

n1 EPC also sued Donaldson for trade dress infringement. However, the district court granted summary judgment for Donaldson on the issue and EPC has not appealed.

The court subsequently denied EPC's motion for summary judgment of infringement of the *'456 patent* [**5] by the NG Air Alert and also denied the parties' cross-motions for summary judgment on Donaldson's defense of invalidity of the *'456 patent* by reason of the on-sale or public-use bars of 35 U.S.C. § 102(b). *Id.* at 885. Therefore, the main issues remaining for [**983] trial were EPC's claim that the NG Air Alert infringed the *'456 patent*, EPC's claim that infringement by the Air Alert was willful, and Donaldson's allegation that the *'456 patent* was invalid under the on-sale and public-use bars of 35 U.S.C. § 102(b). However, about one month before trial, Donaldson moved for summary judgment of invalidity of the *'456 patent* based on a newly asserted theory of obviousness-type double patenting over the *'728 patent*. EPC argued that the defense was untimely and prejudicial and should not be allowed. The district court disagreed with EPC and allowed Donaldson to assert the defense, though the court ultimately denied Donaldson's motion for summary judgment of invalidity. *Summary Judgment II*, 225 F. Supp. 2d at 1131. n2

n2 The district court held that while claim 1 of the *'456 patent* was not patentably distinct over claim 1 of the *'728 patent*, Donaldson had not shown that claims 2 and 3 of the *'456 patent* were not patentably distinct. *Summary Judgment II*, 225 F. Supp. 2d at 1116-31. Therefore, claims 2 and 3 of the *'456 patent* remained for trial.

[**6]

A trial was subsequently held in which the jury found that the NG Air Alert infringed claims 2 and 3 of the *'456 patent*, both literally and under the doctrine of equivalents. The jury also found that infringement by the Air Alert was willful and that claims 2 and 3 were not invalid under the on-sale or public-use bars of 35 U.S.C. § 102(b). As a result, the jury awarded EPC a total of almost \$ 6 million in damages, consisting of \$ 5,269,270 in lost profits caused by Donaldson's sales of the Air Alert (of which \$ 3,826,889 was attributed to lost sales and \$ 1,442,381 was attributed to price erosion) and a reasonable royalty for infringement by the Air Alert and the NG Air Alert.

Both parties then submitted post trial motions. Donaldson reasserted, among other things, its defense of invalidity of the *'456 patent* by reason of obviousness-type double patenting over the *'728 patent*. The district court again rejected the defense. *Engineered Prods. Co. v. Donaldson Co.*, 330 F. Supp. 2d 1013, 1022-23 (N. D. Iowa 2004) ("Post-Trial Motions"). EPC in turn moved for, among other things, enhanced damages, pre-and post-judgment interest, and costs [**7] and attorney's fees. *Id.* at 1043 & n. 3. The district court granted EPC's motions for enhanced damages, pre-and post-judgment interest, and costs and attorney's fees. *Engineered Prods. Co. v. Donaldson Co.*, 335 F. Supp. 2d 973, 988-89 (N. D. Iowa 2004) ("Attorney's Fees"); *Post-Trial Motions*, 330 F. Supp. 2d at 1048-49. In an amended judgment, the district court ultimately awarded EPC \$ 15,807,810 in trebled damages for infringement by the Air Alert, \$ 31,194 as a reasonable royalty for infringement by the NG Air Alert, n3 and, finally, pre-and post-judgment interest. Amended Judgment. In a separate order, the court awarded EPC \$ 1,844,933 in attorney's fees and \$ 132,725.20 in expenses. *Attorney's Fees*, 335 F. Supp. 2d at 988.

n3 In order to avoid duplicative recovery, the court eliminated the royalty award with respect to the Air Alert and reduced the amount of the NG Air Alert royalty to \$ 31,194.

Donaldson subsequently filed a timely appeal to this court and EPC cross appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

II.

We turn first to Donaldson's [**8] contention that the NG Air Alert does not, as a matter of law, infringe claims 2 or 3 of the '456 patent. Donaldson makes two primary arguments: (1) that the district court erred in its construction of the limitation [**984] "means for selectively disengaging," and (2) that the court erred in applying its construction of the limitation "interengagable notches" to the NG Air Alert. Because we agree with Donaldson that the district court erred in its construction of "means for selectively disengaging," and because we further agree that under the proper construction the NG Air Alert does not infringe as a matter of law, we do not reach Donaldson's second argument.

Claims 2 and 3 of the '456 patent are dependent upon claim 1. Therefore, both contain the limitation "means for selectively disengaging the interengagable notches so as to permit the diaphragm to return to its infold position when the vacuum in the first chamber is relatively low." The limitation is in means-plus-function form. Accordingly, in construing it, we must "first ...identify the claimed function and then ...determine the structure in the specification that corresponds to that function." *Frank's Casing Crew & Rental Tools, Inc. v. Weatherford Int'l, Inc.*, 389 F.3d 1370, 1376 (Fed. Cir. 2004). [**9] "A structure disclosed in the specification qualifies as 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005).

The district court identified the function of the limitation at issue as "selectively disengaging the interengagable notches so as to permit the diaphragm to return to its infold position when the vacuum in the first chamber is relatively low." *Summary Judgment I*, 165 F. Supp. 2d at 878-79. The court then identified the corresponding structure as the "button," stating that it "receives and transfers forces which overcome the reset button spring and move the locking member away from its engaged position so that the coiled compression spring can then push the diaphragm back to its infold position." *Id.* at 880. The court rejected Donaldson's argument that the corresponding structure must also include the flange. In doing so, the court stated that the flange of the locking member was identified as performing a "pivoting function." [**10] "Consequently, the court stated, including the flange as corresponding structure would impermissibly read a limitation of pivoting into the claim. *Id.* at

879-80 (citing *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225 (Fed. Cir. 2001)).

On appeal, Donaldson contends that the district court's construction is too broad because it does not account for all of the structure disclosed in the specification as necessary for performing the claimed function of "selectively disengaging the interengagable notches." In particular, Donaldson contends that, in addition to the button, the flange, bottom wall, and enlarged hole are also necessary for disengaging the notches. The mere fact that the flange may perform the claimed function by pivoting, Donaldson asserts, does not mean that including the flange within the corresponding structure reads a "pivoting function" into the claim limitations.

EPC responds that the district court correctly identified the button as the corresponding structure for performing the claimed disengaging function. EPC asserts that the specification indicates that it is only the button and spring that are necessary to perform [**11] the claimed function. '456 patent, col. 6, ll. 9-12 ("If it is desired to permit the diaphragm to return to its infold position, as shown in FIG. 3, a person need only push the button, as shown in FIG. 4, against the bias of spring." (numerals omitted)). In addition, EPC asserts that dependent claims 5 and 6 specifically add the pivoting function and related structure that is omitted from [**985] claims 2 and 3. Therefore, EPC argues the court correctly excluded the flange and bottom wall from the corresponding structure of "means for selectively disengaging."

We agree with Donaldson that the district court construed "means for selectively disengaging" too broadly by not identifying all of the structure necessary to perform the stated function. The specification of the '456 patent expressly states

When it is desired to reset the indicator after cleaning or replacement of the air filter and after the member has been locked up, ...the thumb of the operator ...is pressed against the button to move the member from its off-center position to a vertical dotted line position by reason of the cooperation between the flange and the bottom wall and the enlarged hole ...to release the notches [**12] and ...permit [the] spring to return the indicating assembly to its lower home position ...

If it is desired to permit the diaphragm to return to its infold position, ...a person need only push the button ... against the bias of [the] spring. This will

cause the locking member to pivot, about the flange, from its cocked, off-center position, ...to a vertical position where the notches can no longer engage the notches.

Id. col. 5., ll. 50-60 & col. 6, ll. 9-17 (emphases added) (numerals omitted). The specification therefore clearly links the button, flange, bottom wall, and enlarged opening to the function of disengaging the interengagable notches. It is true that an individual initiates the process of disengaging the notches by pushing the button located at the bottom of the chamber. However, it is the resulting action of the flange against the bottom wall that actually causes the interengagable notches to disengage. See *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002) ("It remains true, of course, that corresponding structure need not include all things necessary to enable the claimed invention [**13] to work. It is equally true, however, that corresponding structure must include all structure that actually performs the recited function." (emphasis added)).

Our construction also does not read in a functional limitation of "pivoting." It is true that the flange, as disclosed in the specification, pivots about the bottom wall to cause the locking member to disengage the interengagable notches. However, corresponding structure will almost always perform some additional function in the course of executing the claimed function. See, e. g., *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1359-63 (Fed. Cir. 2000) (holding that the corresponding structure was not just a "flat rectangle, but a plastic flap that folds over [an] envelope's opening and is secured to the outside of one or both panels of the envelope" (emphasis added)). In this case, the pivoting of the flange on the bottom wall is simply how the flange operates to disengage the locking member from the notches.

Under our construction, we further conclude that a reasonable juror could not find that the NG Air Alert infringes claims 2 or 3 of the '456 patent. See *Genthe v. Lincoln*, 383 F.3d 713, 716 (8th Cir. 2004) [**14] ("Judgment as a matter of law is appropriate where the evidence adduced at trial is entirely insufficient to support the verdict."). That is because, even assuming the NG Air Alert has structure that performs the function of "selectively disengaging interengagable notches," that structure is not the same or equivalent to the corresponding structure of claims 2 and 3- [*986] namely, the flange, bottom wall, and enlarged opening. See *Frank's Casing Crew*, 389 F.3d at 1378 ("The inquiry for equivalent structure under § 112, P6 examines whether 'the assertedly equivalent structure performs the claimed function in substantially the same way to achieve substantially the same result as the corresponding structure de-

scribed in the specification.'" (citation omitted)). In particular, instead of a flange that works in conjunction with a bottom wall to cause the locking member to tilt back toward the vertical position and disengage the interengagable notches, the accused structure consists of flared fingers that are pushed inward when the operator of the NG Air Alert pushes a button. Therefore, the flared fingers of the NG Air Alert perform the claimed function in a substantially different [**15] way than the flange and bottom wall of claims 2 and 3. Accordingly, we reverse the district court's decision denying Donaldson's motion for JMOL of non-infringement and remand with instructions to enter judgment for Donaldson of non-infringement by the NG Air Alert.

III.

We next turn to Donaldson's contention that claims 2 and 3 of the '456 patent are invalid by reason of obviousness-type double patenting over claim 1 of the '728 patent. As noted, the district court ruled that the claims were not invalid for obviousness-type double patenting. *Post-Trial Motions*, 330 F. Supp. 2d at 1022-23; *Summary Judgment II*, 225 F. Supp. 2d at 1082-1131. On appeal, Donaldson's primary argument is that the district court erred in its analysis by not considering the teachings of various prior art patents. Donaldson concedes that one must only compare the claims of the '456 patent to the claims of the '728 patent in determining the differences between the subject matter claimed by the two patents. However, Donaldson asserts that after doing this the district court should have then looked to the prior art to determine whether one of skill in the art would have considered [**16] the differences obvious. Donaldson contends that under such an analysis, claims 2 and 3 of the '456 patent are invalid for obviousness-type double patenting over claim 1 of the '728 patent.

EPC disagrees with Donaldson and maintains that claims 2 and 3 of the '456 patent are not invalid for obviousness-type double patenting. However, in addition, EPC contends the district court abused its discretion in even allowing Donaldson to assert the defense. According to EPC, that is because Donaldson did not have a valid reason for its delay in asserting the defense. EPC points out that the court even found that Donaldson's timing had "some smack of gamesmanship." EPC further asserts that although the court found that not allowing the defense would result in "possible prejudice to Donaldson," that factor is present in any delayed filing and is not significant where there is no valid reason for the delay. Finally, EPC asserts that the court understated the potential prejudice to EPC in light of the stipulation to dismiss the claims and defenses relating to the '728 patent.

As mentioned, the parties stipulated to dismiss with prejudice all claims and defenses as to the '728 patent. The stipulation [**17] was made after discovery had closed and the time for amending pleadings had passed. In addition, at the time of the stipulation Donaldson had conceded infringement of the '456 patent by the Air Alert and had indicated that its only invalidity defense as to the '456 patent was based on the on-sale and public-use bars of § 102(b). See *Summary Judgment II*, 225 F. Supp. 2d at 1080-81. It was only after the stipulated dismissal of the '728 patent [**987] that Donaldson sought to assert its defense of invalidity of the '456 patent by reason of obviousness-type double patenting over the '728 patent. Donaldson did not file a motion for leave to amend its pleadings, but simply asserted the obviousness-type double patenting defense in a motion for summary judgment of invalidity.

EPC opposed Donaldson's motion for summary judgment on the ground that obviousness-type double patenting was a newly asserted defense that was untimely and prejudicial to EPC. In light of EPC's position, and considering that Donaldson had previously made no mention of the defense, the district court treated Donaldson's summary judgment motion as a motion to amend the pleadings under Rule 15(a) of the Federal Rules of Civil Procedure. [**18] Applying the pleading standard of Rule 15(a), the court first found "little justification" for Donaldson's belated assertion of the double patenting defense. *Id.* at 1085. The court also found that the timing of Donaldson motion had "some smack of gamesmanship." *Id.* However, the court concluded that the balance of the potential hardships between the parties, along with the liberal pleading standard of Rule 15(a), favored allowing Donaldson to assert the defense. In particular, the court found that while there was little risk of prejudice to EPC in allowing the defense, n4 there was risk of "substantial" prejudice to Donaldson in not allowing it. *Id.* at 1085-86.

n4 The district court found little risk of prejudice to EPC because it concluded that EPC had sufficient time to address the merits of the defense. *Summary Judgment II*, 225 F. Supp. 2d at 1086.

The Eighth Circuit reviews a district court's decision to grant or deny a motion to amend the pleadings for abuse of discretion. *United States v. Fairview Health Sys.*, 413 F.3d 748, 749 (8th Cir. 2005); *Williams v. Little Rock Mun. Water Works*, 21 F.3d 218, 225 (8th Cir. 1994). [**19] Rule 15(a) states, in relevant part, that leave to amend a party's pleading "shall be freely given when justice so requires." *Fed. R. Civ. P. 15(a)*. The Supreme Court has interpreted this to mean that

in the absence of any apparent or declared reason- such as undue delay, bad faith or dilatory motive on the part of the movant, repeated failure to cure deficiencies by amendments previously allowed, undue prejudice to the opposing party by virtue of allowance of the amendment, futility of amendment, etc.- the leave sought should ...be "freely given."

Foman v. Davis, 371 U.S. 178, 182, 83 S. Ct. 227, 230, 9 L. Ed. 2d 222 (1962); see also *Perkins v. Spivey*, 911 F.2d 22, 35 (8th Cir. 1990) (same). The Eighth Circuit has further held that

when a considerable amount of time has passed since the filing of a complaint and the motion to amend is made on the eve of trial and will cause prejudice and further delay, courts require the movant to provide some valid reason for the belatedness of the motion.

Thompson-El v. Jones, 876 F.2d 66, 67 (8th Cir. 1989) (emphasis added); see also *Williams*, 21 F.3d at 225 [**20] (same).

In this case, we agree with EPC that the district court abused its discretion in allowing Donaldson to assert its obviousness-type double patenting defense. See *Maune v. Int'l Brotherhood of Elec. Workers*, 83 F.3d 959, 964 (8th Cir. 1996) ("An abuse of discretion occurs when the district court 'commits a clear error of judgment' in weighing the relevant factors." (citation omitted)). First, Donaldson's motion to assert the new defense occurred [**988] about one month before trial, which was long after the initial complaint was filed and the time for amending pleadings had passed. Second, the district court found, and we agree, that Donaldson offered "little justification" for the delay and that its conduct had "some smack of gamesmanship." Therefore, the critical issue was whether granting the motion would be prejudicial to EPC. See *Thompson-El*, 1596, 05-1002, 876 F.2d at 67. It was in its consideration of this last factor that we find the district court clearly erred.

In particular, we think the court's analysis greatly understates the potential harm to EPC in allowing Donaldson to assert the double patenting defense. Before the parties agreed to [**21] the stipulated dismissal, EPC could have proceeded with its infringement claims

on either the '456 or '728 *patents*. Accordingly, if Donaldson had made out a successful obviousness-type double patenting defense as to the '456 *patent*, EPC could have still proceeded with its case of infringement of the '728 *patent*. However, EPC no longer has that option because of its prior stipulation to dismiss its claims of infringement of the '728 *patent*. EPC only agreed to dismiss the '728 *patent* after Donaldson conceded infringement of the '456 *patent* by the Air Alert. More importantly, the stipulation occurred after the time for amending the pleadings had passed. Therefore, at the time of the stipulation, EPC had no reasonable basis for believing it would have to defend the validity of the '456 *patent* over the '728 *patent* based on a double patenting defense.

It is true that Donaldson is also subject to potential hardship if it is not allowed to assert the double patenting defense. Donaldson has only itself to blame for its delay, however. Obviousness-type double patenting is not a new defense. Donaldson was obviously aware of the '728 *patent* from the outset of the litigation. Accordingly, we hold [**22] that the district court made a clear error of judgment in concluding that the potential prejudice to Donaldson in not allowing the defense outweighed the potential prejudice to EPC in allowing the defense. We therefore vacate the court's rulings on Donaldson's defense of obviousness-type double patenting. The end result, however, is that we 1596, 05-1002, affirm the court's judgment. The ground for affirming is our ruling that Donaldson should not have been allowed, late in the day, to challenge the validity of the '456 *patent*.

IV.

Donaldson also challenges the damages awarded for infringement by the Air Alert. As noted, the district court awarded EPC \$ 5,269,270 in lost profits for infringement by the Air Alert and a royalty of \$ 31,194 for infringement by the NG Air Alert. At the outset, we reverse the reasonable royalty award, as we have reversed the judgment of infringement by the NG Air Alert and have directed the district court to enter JMOL of non-infringement.

As for the \$ 5,269,270 awarded for lost profits, as noted, the jury attributed \$ 3,826,889 to lost sales and \$ 1,442,381 to price erosion damages. Donaldson contends that neither award is supported by substantial evidence. [**23] Turning first to the lost sales award, Donaldson argues that the award must be vacated because over half of the "lost sales" relate to sales of the non-infringing NG Air Alert rather than sales of the infringing Air Alert. Donaldson recognizes that EPC's damages theory at trial was that it lost all of the sales under the 1996 GMT-800 contract as a result of Donaldson's infringing bid (i. e., Donaldson's bid that was based on the Air Alert). How-

ever, Donaldson asserts that EPC failed to prove the existence of a [*989] long-term contract between Delphi, a manufacturer of automobile components, and EPC. Donaldson therefore contends that EPC failed to prove that Donaldson's infringement by the Air Alert caused EPC to lose sales to the NG Air Alert. In any event, Donaldson contends, even if substantial evidence supports EPC's lost sales theory, a new trial is needed in order to assess whether the NG Air Alert was an available and acceptable non-infringing substitute.

In response, EPC contends that substantial evidence supports the jury's full award of lost sales. According to EPC, that is because Donaldson, by submitting the infringing Air Alert bid, secured a long-term contract with Delphi, [**24] which in turn allowed Donaldson to switch from the infringing Air Alert to the non-infringing NG Air Alert without having to secure a new contract. EPC asserts that its sales lost to the NG Air Alert were therefore caused by Donaldson's original sale of the infringing Air Alert.

We conclude that substantial evidence supports the jury's verdict on this aspect of the damages award. Most importantly, EPC submitted evidence to support its assertion that Donaldson's infringing bid secured a long-term contract with Delphi. This evidence included a copy of the contract and a letter of confirmation sent by Delphi to Donaldson. As a result of the contract, Donaldson was able to substitute the Air Alert with the NG Air Alert without having to submit a new bid to Delphi for the units required in connection with the 1996 GMT-800 contract. This is supported by testimony EPC submitted at trial. Substantial evidence therefore supports EPC's theory that Donaldson was able to make its non-infringing NG Air Alert sales only as a result of its initially infringing sales of the Air Alert. In addition, EPC and Donaldson were the only two available suppliers of progressive air filter restriction indicators. [**25] It thus is reasonable to conclude that EPC would have made all of the sales under the 1996 GMT-800 contract but for Donaldson's infringing bid. In sum, substantial evidence supports the jury's award of \$ 3,826,889 for lost sales. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (*Fed. Cir.* 1995) (holding that patent infringement damages "should approximate those damages that will fully compensate the patentee for infringement" (emphasis in original) (citation omitted)). n5

n5 We also reject Donaldson's contention that a new trial is needed to determine whether the NG Air Alert was an available and acceptable non-infringing substitute. Aside from the fact that the NG Air Alert was not in existence at the time Donaldson submitted its bid for the 1996 GMT-800 platform, Delphi terminated its agreement

with Donaldson because it found the NG Air Alert unacceptable.

Donaldson also contends that substantial evidence does not support the \$ 1,442,381 awarded for price erosion damages. EPC's theory was that Donaldson's infringing bid on the 1996 GMT-800 platform forced EPC to lower its bid to ABC, a manufacturer of automobile components, on the 1996 GMT-360 [**26] platform to \$ 2.24 per indicator, which in turn forced EPC to submit a bid of \$ 2.25 per indicator to Delphi for the 2000 GMT-800 platform. Donaldson asserts that EPC's theory does not hold up because EPC did not submit evidence showing that the bid to ABC was communicated to Delphi.

In response, EPC contends that but for Donaldson's infringing 1996 bid, EPC would have won the 1996 GMT-800 contract and would have done so with a higher bid "unaffected by competition." However, due to Donaldson's infringement, EPC contends it was forced to make price concessions in bidding on the 2000 GMT-800 [*990] platform. According to EPC, that is because, after Delphi awarded Donaldson the 1996 GMT-800 contract, EPC was forced to lower its bid on ABC's 1996 GMT-360 contract to \$ 2.24 per unit. As a result of this previous bid to ABC, EPC contends that it was then "basically stuck" with that same bid when it submitted its offer to Delphi for the 2000 GMT-800 platform.

To prove price erosion damages, a plaintiff must "show that 'but for' infringement, it would have sold its product at higher prices." *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1357 (Fed. Cir. 2001). [**27] In this case, EPC has not submitted such evidence. In particular, EPC's theory seems to hinge on the assumption that the bid to ABC was somehow communicated to Delphi, thereby locking EPC into the \$ 2.24 bid it submitted to ABC when it bid four years later in connection with the 2000 GMT-800 contract. For instance, EPC's expert stated that "Engineered Products felt that that price had already essentially been set for them by virtue of the price that they were --by the price relationship they'd established in the ABC contract." However, EPC has not offered substantial evidence showing that the bid to ABC was communicated to Delphi. The only evidence offered by EPC appears to be testimony that "ball park" figures for the 1996 GMT-360 project were communicated to a design engineer at GM, and that this design engineer had an office in close proximity to the design engineer for the GMT-800 project. EPC asserts that the jury could have inferred from this testimony that Delphi knew of the bid to ABC. We disagree.

As an initial matter, EPC only alleges that ball park figures were communicated to the design engineer at

GM. Therefore, EPC has not shown that ABC disclosed to GM the actual bid [**28] by EPC. In fact, ABC's corporate representative testified that EPC's \$ 2.24 bid was not disclosed to anyone at GM. However, even assuming that the bid was disclosed to the GMT-360 design engineer, the jury would need to further infer that the information was subsequently passed on to the GMT-800 design engineer, and that it was then passed on to people at Delphi. EPC's only support for these inferences is that the GMT-360 and GMT-800 design engineers had office space in close proximity to one another. We think this evidence is simply too speculative to support the necessary inferences. See *Neb. Plastics, Inc. v. Holland Colors Americas, Inc.*, 408 F.3d 410, 417 (8th Cir. 2005) ("A reasonable inference is one which may be drawn from the evidence without resort to speculation. Thus, judgment as a matter of law is appropriate when the record contains no proof beyond speculation to support a verdict." (citation omitted)). Accordingly, we reverse the jury's award of \$ 1,442,381 for price erosion damages as not supported by substantial evidence.

V.

As noted, the jury also found that Donaldson's infringement by the Air Alert was willful. Donaldson contends that we must [**29] vacate this finding because the jury instruction emphasized that Donaldson did not obtain an opinion of counsel as to whether the Air Alert infringed the '456 patent. In response, EPC first contends that Donaldson waived this argument by not objecting to the jury instruction at trial. In any event, EPC asserts, the instruction did not direct the jury to draw an adverse inference from the failure of Donaldson to seek legal counsel, but rather, simply instructed the jury to consider consultation of counsel, vel non, as one factor in its willfulness deliberation.

[*991] We see no reason to disturb the jury's finding of willful infringement. As an initial matter, it appears that Donaldson did not object to the jury instruction during the trial. *n6 Fed. R. Civ. P. 51(c); Chem-Trend, Inc. v. Newport Indus., Inc.*, 279 F.3d 625, 629 (8th Cir. 2002) (holding that failure to timely object to jury instructions results in waiver of the objection). In situations where a party has waived its objection, the Eighth Circuit reviews the instructions for "plain error," only reversing in "the exceptional case where the error has seriously affected [**30] the fairness, integrity, or public reputation of judicial proceedings." *Daggitt v. United Food & Commercial Workers Int'l Union*, 245 F.3d 981, 985 (8th Cir. 2001). In the instant case, we do not see any error, let alone plain error, in the instructions submitted to the jury. That is because the instructions merely directed the jury to consider whether Donaldson sought a legal opinion as one factor in assessing whether, under the totality of the circumstances, infringement by

the Air Alert was willful. *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1342-43 (Fed. Cir. 2004) (en banc) ("Determination of willfulness is made on consideration of the totality of the circumstances."). The instructions did not instruct the jury that it could draw an adverse inference based on Donaldson's failure to seek legal advice. Accordingly, we affirm the district court's denial of Donaldson's motion for JMOL or, in the alternative, a new trial on the issue of willfulness.

n6 We note that Donaldson's Reply brief does not respond to the waiver argument advanced by EPC.

VI

Donaldson next challenges the district court's decision [**31] to grant EPC's post-trial motion for enhanced damages. As noted, the court ultimately decided to treble the \$ 5,269,270 awarded for lost profits. *Post Trial Motions*, 330 F. Supp. 2d at 1046. In reaching its decision, the court first determined that Donaldson had engaged in culpable conduct vis-a-vis its willful infringement by the Air Alert. *Id.* at 1045. The court then performed a careful, well-reasoned analysis of the various factors identified in *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 827 (Fed. Cir. 1992), as relevant to determining whether and to what extent enhancement of damages is warranted. *Post Trial Motions*, 330 F. Supp. 2d at 1045-46.

On appeal, Donaldson contends that we must vacate, or at least reduce, the district court's award of enhanced damages in view of our conclusion that the NG Air Alert does not infringe the '456 patent. Donaldson asserts that that is because the jury's lost sales award includes sales of the non-infringing NG Air Alert. Donaldson also asserts that the district court, by upholding the jury's finding of infringement by the NG Air Alert, improperly discounted Donaldson's good-faith [**32] efforts to design around the '456 patent. Therefore, Donaldson argues, the issue of enhanced damages needs to be remanded to determine whether Donaldson's successful remedial efforts to design around the '456 patent offset the other factors the court found to favor enhancement of damages. In response, EPC contends the district court did not abuse its discretion in view of its findings as to the egregiousness of Donaldson's infringement by the Air Alert.

We agree with EPC that even though the district court erred in not granting Donaldson JMOL of non-infringement by the NG Air Alert, the court did not abuse [**992] its discretion in trebling the damages attributed to the sales of the Air Alert. In particular, the

court found that Donaldson engaged in "deliberate copying" and failed to make a good-faith effort to avoid infringement by the Air Alert. *Id.* at 1045. The court further found that this was not a close case of infringement, as evidenced by the strong showing of willful infringement. *Id.* In addition, the court found that Donaldson's remedial efforts, "even viewed in the light most favorable to Donaldson, do not offset the weight of other 'egregiousness' factors [**33] weighing in favor of enhancement of EPC's damages." *Id.* at 1046 (emphasis added). Accordingly, we do not think the district court abused its discretion in trebling the damages for infringement by the Air Alert even though we have reversed the court's decision as to infringement by the NG Air Alert. n7

n7 We also find no error in the district court's decision to treble the full lost sales award, as we have already determined that substantial evidence supports that award.

However, we must nevertheless reduce the total amount of the enhanced damages awarded in order to account for the fact that while we affirm the jury's award of \$ 3,826,889 for lost sales, we reverse the jury's award of \$ 1,442,381 for price erosion damages. The base from which damages are trebled is therefore \$ 3,826,889 instead of \$ 5,269,270. Taking that into account, the proper amount of trebled damages is \$ 11,480,667. Accordingly, we vacate the portion of the district court's judgment awarding EPC \$ 15,807,810 and remand with directions to enter judgment of \$ 11,480,667.

VII.

Finally, Donaldson contends that we must vacate the district court's awards of attorney's fees, costs, [**34] and interest so that the court can assess the extent to which EPC prevailed in view of our holding of non-infringement by the NG Air Alert and our reduction in the amount of damages caused by infringement by the Air Alert. Turning first to attorney's fees and expenses, the district court granted EPC's motion for \$ 1,844,933 in attorney's fees and \$ 132,725.20 in expenses. *Attorney's Fees*, 335 F. Supp. 2d at 981, 986. In granting the motion, the court first determined that the case was exceptional under 35 U.S.C. § 285 as a result of the jury's finding of willful infringement. *Id.* at 984. Second, the court determined that an award of attorney's fees and expenses was appropriate given the culpable nature of Donaldson's infringement, at least as to the Air Alert. The court also noted that Donaldson's "concede-nothing-and-take-no-prisoners approach to the litigation added significantly to EPC's attorney fees and expenses, such that it would be inequitable to force EPC to bear all of those fees and

expenses." *Id.* Lastly, the court determined that the full amount of fees and expenses sought by EPC was reasonable given the extent to which EPC "prevailed" and the extent to which the case was deemed "exceptional." *Id.* at 985.

We review a district court's finding that a case is "exceptional" under 35 U.S.C. § 285 for clear error, while we review the court's ultimate decision to award attorney's fees and costs for abuse of discretion. See *Imonex Servs., Inc. v. W.H. Munzprufer Dietmar Trenner GmbH*, 408 F.3d 1374, 1378 (Fed. Cir. 2005). In this case, given the finding of willful infringement, we do not think the district court clearly erred in finding the case exceptional. *Id.* ("The criteria for declaring a case exceptional include willful infringement, bad faith, litigation misconduct and unprofessional behavior."). Nor do we think the court abused its discretion in deciding to award fees. *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1582 (Fed. Cir. 1992) ("The trial court has broad discretion in the criteria by which it determines whether to award attorney fees."). However, in reversing the finding of infringement as to the NG Air Alert, and in reversing the damages awarded for price erosion, we have necessarily altered the extent to which EPC "prevailed" before the trial court. Accordingly, because this was one factor the district court took into consideration in awarding EPC attorney's fees and expenses, we vacate the court's award and remand for reconsideration of what constitutes a reasonable award.

As to the pre-and post-judgment interest, we vacate the court's award and remand with instructions to adjust the interest awarded in order to account for our reversal of the price erosion and reasonable royalty damages.

VIII.

In sum,

(1) We hold that the district court erred in its construction of the limitation "means for selectively disengaging." We further hold that, under the proper claim construction, no reasonable juror could find infringement

by the NG Air Alert. We therefore reverse the court's denial of Donaldson's motion for JMOL of non-infringement by the NG Air Alert and remand with instructions to enter judgment of non-infringement for Donaldson.

(2) We hold that the district court abused its discretion in allowing Donaldson to assert its obviousness-type double patenting defense. We therefore vacate the court's rulings on that defense. However, we still affirm the court's judgment that claims 2 and 3 of the '456 patent are not invalid.

(3) We affirm the district court's award of \$ 3,826,889 for lost sales. However, because the award is not supported by substantial evidence, we reverse the \$ 1,442,381 awarded for price erosion damages. We also reverse the \$ 31,194 awarded as a reasonable royalty for infringement by the NG Air Alert.

(4) We affirm the jury's finding of willful infringement of the '456 patent by the Air Alert.

(5) We find no abuse of discretion in the district court's decision to treble the damages associated with infringement by the Air Alert. However, because we have reversed the price erosion damages, we vacate the \$ 15,807,810 awarded by the district court and remand with instructions to enter judgment for EPC in the amount of \$ 11,480,667.

(6) We find no abuse of discretion in the district court's decision to award costs and attorney's fees. However, in light of our finding of no infringement by the NG Air Alert and our reversal of the price erosion damages, we vacate the court's award and remand for reconsideration of what constitutes a reasonable award. We similarly vacate the court's award of pre-and post-judgment interest and remand with instructions to adjust the interest awarded so as to account for our reversal of the price erosion and reasonable royalty damages.

Each party shall bear its own costs. 1596, 05-1002,